



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,864	12/21/2001	Sridhar Ranganathan	KCC-16,282	4026

35844 7590 06/24/2005

PAULEY PETERSEN & ERICKSON
2800 WEST HIGGINS ROAD
HOFFMAN ESTATES, IL 60195

EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

ml✓

Office Action Summary

Application No.

10/036,864

Applicant(s)

RANGANATHAN ET AL.

Examiner

Elizabeth M. Cole

Art Unit

1771

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18,22-30,32-34,52,56,58-64,66-68,71,72,75,76,80-82 and 86-88 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 18, 22-30, 32-34, 52, 56, 58-64, 66-68, 71-72, 75-76, 80-82, 86-88 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____

il

Art Unit: 1771

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/18/05 has been entered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 18, 22-25, 29-30 32-34, 52, 56, 58-59, 63-64, 66-68, 80-82, 86-88 rejected under 35 U.S.C. 103(a) as being unpatentable over Assarsson et al, U.S. Patent No. 3,901,236 in view of Dodge II et al, U.S. Patent No. 5,994,615 and Cook et al U.S. Patent No. 6,562,743. Assarsson et al discloses a superabsorbent particle which is coated with a cellulosic material such as a cellulosic fiber. See col. 3, line 41 – col. 4, line 46. With regard to the limitation that the superabsorbent is “particulate-coated”, Applicant’s specification defines particulates as including fibers. See page 11, lines 10-17 of the instant specification. Therefore, the new limitation is met by the disclosure of Assarsson. The indicated allowance of claims 30 and 64 is withdrawn in view of the amendment to those claims which broaden them to recite 2 weight percent “or more” of binder and ninety eight weight percent “or less” of superabsorbent. The addition of “or more” and “or less” necessitates the rejection of those claims for the reasons of record. The superabsorbents may be incorporated into airlaid absorbent pads. See col. 7, lines 21-50. The individual particles may comprise up to about 80%

Art Unit: 1771

fibers to 10% on the superabsorbent particles. See col. 10, lines 17-26. With regard to limitations regarding the absorbent capacity of the composite absorbent web, although Assarsson et al does not disclose the claimed values, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the absorbency capacity of the web through the process of routine experimentation by optimizing factor such as the amount and placement of the superabsorbent particles, the choice of the other components of the absorbent pad, etc. Assarsson et al differs from the claimed invention because it does not disclose the presence of binders such as binder fibers in the airlaid pads. Dodge teaches at col. 12, lines 5-25 and col. 14, lines 9-16, that suitable absorbent materials including airlaid webs may include up to about 10 percent of a binder component based on the weight of the web. Dodge teaches that the binder component may comprise a thermoplastic polymeric fiber such as a polyolefin fiber or a bi-component fiber such as polyethylene/ polyethylene terephthalate fibers. See col. 16, lines 10-22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the binders of Dodge in the airlaid web of Assarsson et al, motivated by the expectation that these would enhance the absorbency and strength of Assarsson absorbent web. Neither Assarsson nor Dodge teach the particularly claimed amount of superabsorbent. Cook teaches that from 20-80% of superabsorbent particles can be added to fibers to form an absorbent structure for use in manufacturing an absorbent article. See col. 8, lines 23-30. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed 20-80 % superabsorbents in the absorbent core

of Assarsson, motivated by the teaching of Cook et al that this amount produces excellent results in absorbent structures.

4. Claims 26-28, 60-62, 71-72, 75-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Assarsson in view of Dodge and Cook as applied to claims above, and further in view of Radwanski et al, U.S. Patent No. 4,939,016. Neither Assarsson nor Dodge teaches incorporating elastomeric fibers or meltblown fibers into the airlaid absorbent web or employing additional layers with the airlaid layer. Radwanski et al teaches that meltblown elastomeric fibers may be incorporated into airlaid webs in order to enhance the aesthetic properties of the web by producing a more cloth-like product. See col. 5, lines 9-27 and col. 6, lines 1-27, col. 7, lines 3-57. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated elastomeric meltblown fibers into the absorbent web of Assarsson, motivated by the expectation that this would enhance the aesthetic properties of the web. Radwanski teaches that additional layers may be added to the web, such as col. 8, line 51 – col. 9, line 26, in order to enhance and /or add additional properties to the fabric. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included additional layer such as those taught by Radwanski into the material of Assarsson, motivated by the expectation that additional properties could be added to the fabric, or that existing properties could be enhanced by the additional layers.

5. Applicant's arguments filed 4/18/05 have been fully considered but they are not persuasive. Applicant argues that the nature of the art and the specific structure of the

claimed inventions as a whole has been ignored. However, the action sets forth the basis for the rejection, including where the elements are found in the cited references as well as the motivation to combine the references.

6. Applicant argues that surge materials are designed to acquire and spread fluid while absorbent materials are meant to retain fluid. However, the instant claims are not limited to a particular type of material. Further, as stated by Applicant, surge materials acquire fluids. Generally, fluids are acquired by absorption. Finally, the teachings of Dodge, Assarsson and Veith all concern forming absorbent products which comprise fibrous materials, and which may further comprise binders, superabsorbent particles, etc. Therefore, they are all from the same art area. Dodge teaches employing binder fibers to bind the nonwoven so that it has more strength and integrity. That is why binder fibers are employed, to bind. Therefore, whether Dodge uses them in a surge layer where fluids are acquired as opposed to absorbed, (the difference between acquired and absorbed has not been clarified on the record), it still would have been obvious to one of ordinary skill in the art to have incorporated them in the material of Assarsson in order to improve the integrity, bonding and strength of the nonwoven material of Assarsson. Applicant argues that it is irrelevant that Dodge teaches employing binder fibers in airlaid webs since Dodge discloses a surge material. However, the teaching is highly relevant because it shows that bicomponent binder fibers are useful in providing additional integrity to airlaid webs.

7. Applicant's arguments concerning Veith have been considered. However, in view of the amendments to the claims which broaden the claims, the rejection

Art Unit: 1771

employing Cook which was set forth in previous actions and which was overcome by the amendments which narrowed the amount of superabsorbent employed is re-stated above, since Cook teaches 20-80% superabsorbent. Therefore, at this time, the Veith rejection is not maintained since it is not necessary in view of the broader claims which are currently presented for examination which generally correspond to the claims presented earlier in prosecution.

8. With regard to Radwanski, Applicant argues that the improved aesthetics are due to hydroentangling rather than the presence of the elastomeric meltblown web.

However, Radwanski teaches that incorporating the meltblown webs with other layers results in a cloth-like web which has excellent strength and isotropy. See col. 3, lines 37-56.

9. Applicant argues that claims 70-72 and 75-76 are drawn to support members for the claimed composite web. However, the claims recite an absorbent composite web which comprises additional layers. The additional layers are provided by Radwanski.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/036,864
Art Unit: 1771

Page 7

The fax number for all official faxes is (703) 872-9306.

A handwritten signature in black ink, appearing to read "Elizabeth M. Cole". The signature is fluid and cursive, with the first name being the most prominent.

Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c